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## Patent Abstracts of Japan

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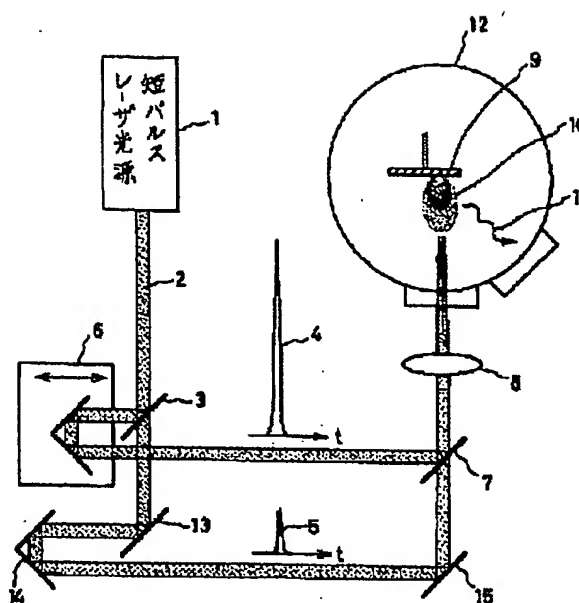
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APPLICANT : NIPPON TELEGR & TELEPH CORP  
<NTT>;

INVENTOR : UESUGI SUNAO;

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TITLE : X-RAY GENERATION DEVICE AND  
GENERATION METHOD THEREFOR



ABSTRACT : PURPOSE: To modulate an X-ray generation amount with the energy of an excited laser beam kept constant, by generating an X-ray under the irradiation of a time interval-controlled main and sub-pulse laser beams to a metallic target.

CONSTITUTION: A short pulse laser beam 2 released from a short pulse laser beam source 1 is divided into a main pulse laser beam 4 having high peak power and a sub-pulse laser beam 5 weaker than the beam 4, respectively through the first beam splitter 3. The beam 5 is reflected on mirrors 13 to 15, and condensed through a section 8 for irradiation to a metallic target 9 within a vacuum vessel 12, thereby forming a reserve plasma 10 in the vicinity of the surface of the target 9. On the other hand, the main pulse laser beam 4 is emitted at a time interval delayed relative to the beam 3 with a delay circuit 6, and irradiated to the target 9. According to this construction, the amount of a generated X-ray can be controlled and modulated by controlling the time intervals between the beams 5 and 4 with the circuit 6.

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